

Substance Abuse Prevention in Kentucky: A White Paper

KENTUCKY CABINET FOR HEALTH AND FAMILY SERVICES

DIVISION OF SUBSTANCE ABUSE

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SUBSTANCE ABUSE PREVENTION IN KENTUCKY:

A WHITE PAPER

Executive Summary

Substance abuse prevention in Kentucky is concerned with all drugs of abuse, including legal and illegal substances, because drug abuse is closely associated with numerous health, legal, and impairment problems. Effective substance abuse prevention is grounded in science, and aims to delay or halt the initiation of substance abuse through a range of individual and environmental strategies (e.g., education, community mobilization, policy development, enforcement, vendor education, media campaigns). There is evidence that for each \$1 invested in prevention, up to \$10 is saved in the treatment of alcohol, tobacco, and other substance abuse. Prevention services are delivered through a comprehensive array of programs and organizations, and are most often delivered in collaboration with Regional Prevention Centers across the Commonwealth. Recent statistics in Kentucky (and at the national level) evidence significant reductions in the use of most substances by youth over the past five years. Substance abuse prevention programs play a major role in producing these findings, and represent a vital component of Kentucky's attempts to combat drug abuse.

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Introduction

The Cabinet for Health and Family Services employs an Expert Panel on Substance Abuse Prevention to provide guidance on the development of a statewide prevention system based on best practices. The panel consists of distinguished professors from several state universities, who have special expertise in prevention science. The Division of Substance Abuse in the Department for Mental Health and Mental Retardation Services convenes and directs the work of the panel.

Substance Abuse Prevention in Kentucky: A White Paper has been prepared by the Division in collaboration with the Expert Panel. By outlining basic definitions, principles, and approaches, the paper provides a perspective which may serve Kentucky Drug Summit leaders as a foundation for Kentucky's prevention system.

The broader field of prevention includes research and practice related to preventing a wide variety of problematic issues (e.g., violence, unplanned pregnancy, HIV/AIDS, criminal behavior). Some broad strategies may be employed to address all of them. However, the focus of this white paper is on ideas and strategies specific to the prevention of substance abuse.

What Drugs are of Concern to Prevention?

Alcohol and tobacco are key targets.

Prevention is concerned with all drugs of abuse, including legal and illegal substances. Particular attention is devoted to tobacco and alcohol abuse because of their widespread use and severe health consequences. Tobacco and alcohol use are

of special concern since they serve as a "gateway" to the use of other drugs.

Tobacco use causes 430,000 deaths per year in the United States, followed by more than

"From the standpoint of reducing negative consequences to society, particular attention should be given to tobacco and alcohol abuse."

100,000 from alcohol and nearly 16,000 from illicit drugs.² One in four deaths each year in the U.S. is attributable to alcohol, tobacco, or illicit drug use. There are more deaths, illnesses, and disabilities from drug abuse than from any other preventable condition.

In Kentucky, tobacco is an overwhelming concern. In 2002, Kentucky led the nation in adult cigarette smoking prevalence, 32.6% vs. 22.8% in the U.S.³ Children in the Commonwealth smoke and chew tobacco at rates much higher than the national average, and lung cancer rates among adults are the highest in the country.^{4,5} Marijuana use among youth is also higher than the national average, perhaps related to the fact that Kentucky is one of the top marijuana producing states.

The last few years have seen an explosion in prescription drug abuse problems and methamphetamine (meth) labs moving into the state. Inhalant use, ecstasy, even heroin abuse are significant problems among young people in various areas around the Commonwealth. These are compelling issues which must be addressed by prevention, treatment, and law enforcement working together. However, they should

not be allowed to replace persistent efforts aimed at the most commonly abused substances.

What is Drug Abuse?

Addiction is only one of its many consequences.

Drug abuse involves a pattern of increasing levels of use resulting in negative health consequences, impairment in social or psychological functioning, or inability ability to function at work. (For the purposes of this paper, the terms "drug abuse" and "substance abuse" will be used interchangeably.) Although not all people who use drugs are physically dependent or experience negative consequences, many develop addiction, a chronic, relapsing disease.

A great variety of problems are associated with drug abuse. Health problems include acute problems such as heart and asthma attacks, alcohol poisoning, drug overdose, withdrawal symptoms (including hangover), and temporary or permanent physical damage to the body. In addition a wide variety of disease conditions are associated with chronic tobacco (e.g., cancer and heart disease), alcohol (e.g., cirrhosis of the liver), and other drug use including drug dependency and addiction. Youthful experimentation can lead to more serious and long-term drug involvement. Adolescent tobacco use, for example, often triggers tenacious addiction. Legal problems result from illegal activities related to drug use, e.g., underage drinking and cigarette smoking, illegal drug dealing or possession, illegal procurement of pharmaceuticals, and theft, robbery, or violence connected with acquiring drugs. For example, in 2002, teenage drivers were involved in 23 fatal car crashes in Kentucky.⁶ Impairment problems result from a drug's short-term effect on the

user's emotional responses, behavior, judgment, motivation, and psychomotor functioning. Impairment can result in accidents, unplanned sexual encounters, acts of aggression, and other destructive behavior. Interpersonal problems, work problems, and school problems are all associated with impairment effects.

What is Substance Abuse Prevention?

Users are not losers! They may benefit from prevention efforts.

Substance abuse prevention aims to delay or stop the initiation of drug abuse through the use of individual and environmental approaches designed to reduce risk. Effective substance abuse prevention is grounded in science and is comprehensive in nature. In other words, a variety of science-based approaches are needed in combination to reduce the risk of substance abuse. Prevention serves persons who do not currently use drugs, persons who use drugs in a non-abusive way, and persons who may currently abuse drugs, but who are not in need of treatment for drug abuse or dependency.

Substance abuse prevention must be viewed in the context of a continuum from risk reduction to treatment. Problem identification and referral bridges prevention and treatment by sorting out who needs prevention and who needs treatment. Persons who are experiencing drug problems (or for whom the risk of developing problems is particularly high) need to be assessed. For example, a worker who tests positive for drugs would need to be assessed to determine what kind of service might be most helpful: either intensive prevention or some kind of recovery program.

Although there are a multitude of activities that can play a role in substance abuse

prevention, it would be inappropriate to envision prevention as "everything" (i.e.,

"Distinguishing prevention from intervention and recovery activities is essential to the development of effective prevention strategies."

anything that results in a happier, healthier, or higher-functioning individual). The fact is that happy, healthy, and high-functioning people often abuse drugs, and suffer severe consequences as a result. While recognizing that healthy people are more resilient and better equipped to overcome drug-related difficulties, substance abuse prevention must endeavor to address the specific factors that motivate the particular behaviors of drug use and abuse.

Who Needs Prevention?

It's not just for kids!

People may assume that prevention activities are targeted primarily at youth since many experiment with drugs and develop addiction during the transitory developmental period of adolescence. Indeed, youth-oriented prevention efforts are the cornerstone of prevention programming. Prevention strategies attempt to discourage youthful experimentation because it can result in serious legal and impairment-related problems besides creating a risk for escalation into heavy use and drug dependency.

Conceptualizing prevention as exclusively youth-oriented, however, fails to recognize that most initiation of illegal drug use occurs between the ages of 18 and 34

(adolescence to young adulthood)⁷. The vast majority of the negative consequences associated with drug abuse are experienced by adults and those affected by them.⁸ The behavior of parents and other adults, as well as by community policies developed by adults, set a powerful example for youth.

Prevention of drug abuse is relevant across the entire life span, from the womb to the tomb. For different age groups of adults, the nature and extent of drug abuse problems require prevention to be targeted based on constellations of risk factors (rather than "one size fits all"). Young adults are at particularly high risk, as they often exercise their newfound independence in trying risky behaviors, such as smoking, getting drunk, and "partying" with the popular drugs of the day. Prevention strategies raise awareness of the dangers involved and create an environment more conducive to healthy choices (such as smoke-free/drug-free college dormitories

"... most initiation of illegal drug use happens between the ages of 18 and 34."

and workplaces). Some other groups of adults that are at higher-than-average risk for drug abuse include: 1) those with a history of involvement with the criminal justice system, 2) those with a history of drug abuse as a youth, and 3) those with a history of mental problems, such as conduct disorder as a youth that has become antisocial personality disorder as an adult. Even among the elderly there are potential problems with abuse of medications, either using too little or too much, or inappropriate combinations of prescribed medications.

Prevention strategies aimed at adults are implemented in workplaces, faith communities, healthcare and social services systems, and many other community venues.

Another common misconception is that prevention should be targeted at lower socio-economic and minority demographic groups. This false impression may be the result of media portrayals. Statistics reveal a very different picture. Drug use patterns and the consequences of drug abuse do indeed differ among various social and economic groups (the consequences of drug use for someone living in poverty differ from those with more resources). But persons of wealth and high socio-economic status are as likely as others to use and abuse alcohol and other drugs (and to have associated problems).⁹ In fact, some patterns of drug use are more prevalent among those with more financial resources.

What Strategies are Used in Prevention?

It's not just education in the schools!

If asked to give examples of strategies used to prevent substance abuse, most people would be likely to cite media campaigns and slogans like "Just Say No," along with educational programs in the schools. In reality, prevention strategies encompass a wide variety of activities. Some take the form of specific *programs*, e.g., DARE – a school curriculum delivered by law enforcement officers. Prevention programs aim at influencing the drug use choices of the individuals who participate in the programs. Other prevention strategies aim at changing the environment to make it more conducive to good choices for everyone.

The U.S. Center for Substance Abuse Prevention has identified six prevention

strategies: information, education, alternatives, environmental strategies, community mobilization, and problem identification and referral. Research has demonstrated that a comprehensive approach employing a number of these strategies together is the most effective prevention approach. Explanation of the six strategies is given below, with examples of how they have been implemented in Kentucky.

Information

Making sure the right message gets through

Providing information via printed materials, print and broadcast media, health fairs, group presentations, and web site resources raises awareness of the risks associated with drug use. For example, Kentuckians have worked closely with local media to disseminate messages designed by the Partnership for a Drug-Free America that aim at alerting both youth and adults to the dangers associated with various substances. This well-known campaign utilizes professional advertising talent and focus groups to develop and test effective prevention messages. Providing information on risk is supported by studies noting a correlation between increased perception of risk and reductions in the use of substances. Media messages are also used to communicate social disapproval, which is also correlated with decreased use. 10 Advertisements that show the serious consequences of tobacco use in emotionally evocative ways change pro-tobacco norms, promote smoking cessation, and help to prevent relapse.¹¹

Adults play a special role in prevention, not only through their example, but by communicating their concern about substance use to their children, setting rules and expectations, and providing proper supervision. Prevention information

programs for parents can raise awareness of the drug use patterns in their community, the peer pressures their children may face, and specific actions they can take to help their children avoid substance use.

However, not all prevention information strategies are effective. Inaccurate information that exaggerates dangers (known as "scare tactics") eventually reduces the credibility of the provider, and may backfire when recipients discover the truth and feel they have been manipulated. Programs for youth that exhibit drugs and drug paraphernalia (or provide intriguing details on how drugs are used) are counterproductive – often sparking interest

"The federal Center for Substance Abuse Prevention has identified six primary prevention strategies."

rather than avoidance. Captivating speakers who are in recovery may also inadvertently communicate to youth a sense that they can "get away with" abusing drugs for a time and then wind up a celebrity of sorts. In general, research suggests that brief presentations tend to have very limited and short-term effects. 12

Education Going beyond "Just Say No"

Education as a prevention strategy goes beyond simply raising awareness. Educational approaches (e.g., school-based curricula) involve interaction between the presenter and the recipient and require an investment of time for both delivery of the educational component and training of those who will deliver it. Educational strategies aim at producing increases in knowledge, motivation, and skills that help

prevent drug use. Many educational programs are being delivered in Kentucky classrooms. These programs frequently focus on the middle school grades because vouth often initiate tobacco, alcohol, and other drug use during those years. Examples of educational programs that have been shown to be effective in preventing drug use include Project Alert, LifeSkills Training, and Project Northland. These curricula have been rigorously evaluated and shown to reduce drug use. A Kentucky Department for Public Health study showed that 500 of 691 public and private middle and high schools in Kentucky (73%) provided at least one research-based substance abuse prevention curriculum to students. The state goal is for 100% of schools to make this commitment. 13

Prevention education is not just for youth. Programs for parents that enhance family bonding and parenting skills have been demonstrated to prevent drug use among children in the family. Promising programs for adults (targeting their own, rather than their child's, drug use) are also available.

Effective educational programs generally involve several sessions, with a total program length ranging from six to twenty hours. Because of the time commitment required to complete such programs, it is often difficult to get potential prevention providers to adopt them and potential prevention audiences to participate. This is particularly true for programs aimed at adults. Unlike the "captive audiences" of children in school, parents and other adults are often very difficult to recruit. Despite this obstacle, prevention providers in Kentucky delivered educational programs to over 1,300 adults during fiscal year 2003.

Comprehensive community prevention approaches that combine two or more effective educational programs such as family-based and school-based programs can be more effective than a single program. ¹⁴ In addition, integrating prevention programs into behavioral health services such as mental health and substance abuse treatment is an especially promising approach for preventing substance abuse. ¹⁵

"Decisions about which approaches should be funded by public dollars are now guided by the findings of scientific research."

An exception to the "captive audience" problem with adults occurs when Kentuckians are arrested for DUI. Persons caught driving under the influence are assessed to determine whether they need prevention or treatment, and then are referred to the appropriate service. Last year 10,330 Kentuckians received an intensive prevention education program as part of the DUI program.

Alternatives Not all fun and games

For many years, professionals and parents concerned about youth drug abuse have promoted the idea that young people use and abuse drugs because they have nothing else to do. The belief is that if teens are provided more constructive activities, they will be less inclined to experiment with drug use. While this belief is intuitively plausible, experience and prevention research in the last two decades have shown that a more cautious view is required. ¹⁶ Research on the alternatives strategy has

demonstrated that it is not effective just to fill idle hands, but that the nature of the alternative activity and the youth targeted with the strategy are important influences determining success.

A variety of community services and activities fall within the definition of alternative strategies. These approaches provide positive activities, usually for youth, which serve to divert their energy and attention away from drug involvement. Some approaches, such as academic tutoring programs, address factors like school failure that put a child at increased risk for substance abuse. Mentoring programs (e.g., Big Brothers, Big Sisters) that provide social support and bonding with pro-social adults are among the most promising prevention alternatives. ¹⁷

The Boys and Girls Clubs of America provide a special alternative prevention program to thousands of youth each year in Kentucky. These clubs provide afterschool activities that include delivery of a program called "Smart Moves," which has been demonstrated to reduce alcohol, tobacco, and other drug use. 18

Based on limited evidence, it is thought that effective alternatives strategies will do one of the following: 1) focus on skill building, 2) target youth at greatest risk for drug abuse, 3) pair adolescents with caring adults, or 4) provide the strategy over time, as opposed to a single event. 19 It is also understood that alternatives will be most effective when combined with other types of prevention strategies, such as education programs and policy changes. There is a continuing need for evaluation of alternatives programs, and prevention planners should look for evidence of effectiveness of any proposed alternatives strategy.

Environmental strategies Making healthy choices the easy choices

Some of the most effective prevention strategies aim at influencing the environment in which drug use occurs. Environmental prevention approaches can "make the healthy choices the easy choices." ²⁰ This is achieved by changes in public policy that modify social norms.

Because environmental strategies are relatively "cheap" to implement, and have the potential to influence large numbers of people, they have become especially attractive to elected officials interested in getting the most "bang for the buck." In addition, these strategies are the ones that elected officials can play the most direct role in executing. Political support and leadership are needed for environmental prevention strategies at all levels of government.

Regulatory influences

- □ Ordinances Lexington's smoke-free city ordinance is a prime example of an environmental prevention strategy. Prohibitions on smoking in public places provide a powerful social message to youth, as well as strong motivation for smokers to quit.²¹ In addition, smoke-free campaigns raise awareness of the dangers of secondhand smoke.
- □ **Tax changes** Raising the price of substances by levying additional taxes results in lowered levels of substance use. Youth are particularly vulnerable to this approach.²²
- □ Enforcement Environmental approaches also include increased or more aggressive law enforcement efforts. In Kentucky, the Department for Alcoholic Beverage Control (ABC) monitors businesses selling alcohol and

- tobacco to enforce the provisions regarding underage sales to minors. In addition, ABC staff and prevention specialists provide educational programs to help vendors improve their skills at "carding" and increase their motivation to comply with the law.
- Vendor education Training for all sellers and servers of alcohol has now been mandated by city councils in Bowling Green, Owensboro, Danville, Harrodsburg, Corbin, Georgetown, Lyndon, and Mayfield. Similar environmental strategies are underway in other locations.

"Environmental prevention approaches can make the healthy choices the easy choices."

□ Keg registration policies - These have been passed in Bowling Green, Lexington, and Richmond. These policies provide a mechanism for law enforcement personnel to identify the person who purchased a keg for an underage party. The purpose of this policy is to send a message to parents and others about the social unacceptability of such irresponsible behavior.

Influencing community norms

Parent Alert program - Many environmental approaches attempt to reduce the availability of drugs in one way or another. The "Parent Alert" strategy being implemented in Lexington is one example. A community task force makes arrangements with "drive-thru" liquor stores to have them report the license numbers of vehicles used by youth attempting to purchase alcohol. The

task force sends a letter to each vehicle owner alerting them to the fact that an underage youth driving their vehicle attempted to purchase alcohol. Information about the dangers of underage drinking, as well as an invitation to a prevention program, is included in the letter.

□ Community initiatives - More informal policies implemented in communities can also play an important preventive role. For example, "Safe Homes" networks have been established in several Kentucky locations. These are networks of parents who have signed a public pledge to properly monitor activities at parties their children give or attend. Parents are encouraged to call other parents in the network to "check out" party plans, and to be visible and appropriately attentive to social activities going on in their own homes.

□ Influencing the media -

Environmental strategies may include altering how alcohol, tobacco, and other drug use are portrayed in the media and by businesses advertising their products. Too often these portrayals glamorize smoking, drunkenness, and drug use. For example, concerned parents report that the new "Scooby-Doo 2: Monsters Unleashed" movie just released includes a humorous scene in which

"Political support and leadership is needed for environmental prevention strategies at all levels of government."

"Shaggy" inhales fumes from a whipped cream can, and a television commercial for the movie shows that scene along with the commentary, "Scooby really knows how to party!"
This cavalier portrayal is disturbing to people aware of the devastating and permanent effects of inhalant abuse on children. Many people may also recall the scene in "E.T." where the extraterrestrial innocently gets drunk on a beer and acts funny. Preventionists call for public objections to such scenes in films directed at children.

The marketing of alcohol and tobacco through advertising and promotional activities has a powerful environmental influence on adults as well as youth. Radio messages from college-oriented drinking establishments are particularly egregious. Prevention includes advocacy for more responsible advertising and limitations on "2-fers," "all-you-can-drink," and similar promotions.

Youth in Ashland, Kentucky, (guided by a prevention specialist) took action in a campaign known as "Hands Off Halloween." They objected to posters of Halloween characters such as Shrek and Spiderman (that appeal primarily to kids) being used to advertise alcohol. The youth asked liquor store owners to either eliminate these materials or place them inside the store, rather than in the storefront where children's attention would be drawn to them. All the businesses complied with the youths' request. This was a small victory, but one that took its place in a multi-strategy approach aimed at improving the environment in that community.

Community mobilization It takes a village...

This strategy involves many different activities aimed at building an infrastructure for effective community action. The ultimate goal of community mobilization is a well-functioning community prevention system. "Community" may be defined

geographically or by any sociodemographic or other characteristic that creates an identity for a group of people.

Kentucky has emphasized community mobilization strategies for many years and is known nationally for its collaboration among agencies both at the state and local levels. While many states separate tobacco prevention from other drug prevention activities, Kentucky is a national leader in cross-agency collaboration. In 2000, funds from the Master Settlement Agreement (MSA) were allocated to establish the Kentucky Agency for Substance Abuse Policy (KY-ASAP), and the Kentucky Department for Public Health created tobacco prevention and cessation programs in every local health department. KY-ASAP developed a system of local substance abuse policy boards that are involved in community mobilization strategies. The local health department tobacco coordinators are integrally involved in the work of the KY-ASAP boards. The boards have used a structured, guided process of assessing the needs and resources of the community and developing a plan to address identified substance abuse issues.

In addition to the more recent MSA-funded community mobilization, between 50 and 80 "Champions" community task forces are

"Recent statistics in Kentucky and on the national level show significant reductions in the use of most substances by youth over the past five years." active in the state in any given year. These task forces plan and implement a variety of prevention activities, under the guidance of prevention specialists from Kentucky's Regional Prevention Center network. Support is provided also by the Champions state office, which sponsors an annual Champions conference where volunteers can network and learn from state and

"In Boyd and Greenup counties a coalition including prevention specialists, schools, businesses, elected officials, churches, parents, youth, and concerned citizens addressed youth substance abuse using a variety of strategies. Highly significant decreases in drug use (on the order of 25-50%) were achieved for alcohol, tobacco, marijuana, and prescription drugs."

national experts in community mobilization. Many of the Champions groups have been successful in obtaining funding from the Division of Substance Abuse, and even larger grants from the federal government.

Community mobilization activities include the formation and guidance of groups like Champions. Fund-raising, grant writing, collaborative planning, data collection, program monitoring, and evaluation are other important functions included in this strategy – all geared towards developing an efficient and effective prevention infrastructure.

Another key activity included in this strategy is training. This differs from education in that it is geared toward preparing people to play an effective role in prevention, rather than helping them make healthy choices for themselves. Training teachers to deliver school drug abuse curricula and training task force leaders on effective vs. ineffective prevention approaches are examples of this strategy.

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Community mobilization is being used to address the critical problems of methamphetamine and prescription drug abuse in Kentucky today. Concerned leaders bring together representatives from various segments of the community that can play a role in prevention. A prescription drug abuse "summit" was held in Ashland last year that included officials from health, law enforcement, substance abuse treatment, the justice system, and community service agencies. The group shared information and ideas from their various points of view and made plans for action. Preventionists in Maysville, Kentucky, used a similar approach in anticipation of the methamphetamine problem moving into the Buffalo Trace area. Plans were made to head this problem off, if possible, through cooperative endeavors utilizing community mobilization strategies.

<u>Problem identification and referral</u> *Bridging prevention and treatment*

Problem identification and referral is utilized to identify individuals who are at high risk or already experiencing drug problems. Once the individual is identified, he or she receives a professional assessment. The assessment provides the information needed for an appropriate referral, which can be to either a prevention or a treatment service.

Two programs operated through the Division of Substance Abuse provide examples of the problem identification and referral strategy.

In the Juvenile Justice Early Intervention Program (EIP), high-risk youth are identified when they have their first alcohol- or drug-related encounter with the juvenile justice system. Selected youth and their parents may choose the EIP as a "diversion" from proceeding through the court system. Court-designated workers collaborate with prevention specialists to

"...decisions about which approaches should be funded by public dollars should use the findings of scientific research as a blueprint."

develop appropriate diversion policies and procedures. The youth are assessed by a substance abuse specialist to determine whether they need treatment or intensive prevention education. Those that need prevention receive a multi-session education program, and their parents attend a four-hour prevention class. Parents also receive ongoing information through

prevention newsletters. Kentucky's Juvenile Justice EIP served 3,117 youth in fiscal year 2003.

The KIDS NOW program reaches out to pregnant women throughout Kentucky and provides them with a continuum of services aimed at reducing alcohol, tobacco, and other drug use during pregnancy. The pregnant women are offered an information program that increases their awareness of the possible effects of drug use on the developing fetus. In addition, problem identification is effected through use of a screening tool. If the screening indicates drug use or specific risk factors for drug use, the woman receives a more in-depth assessment. As in the EIP, the results of the assessment determine whether she is referred for prevention or treatment.

These two programs exemplify not only the problem identification and referral strategy, but also how a variety of prevention strategies (information, education, community mobilization) may be used in an integrated approach that also includes intervention and recovery services.

How Do We Know Which Prevention Strategies are Most Effective?

The answer to this question is simple – we rely on credible evidence from rigorous research on the efficacy and effectiveness of prevention strategies and programming. In the substance abuse area this is made somewhat easier because of the huge amount of rigorous research that has been conducted in prevention in the past 20 to 25 years. Much research has been published on the correlates, predictors, and causes of substance abuse among youth (i.e., the risk and protective factors) and how programs that attempt to change these factors influence the outcomes of prevention

programs. However, the risk and protective factors that help explain why some use substances and others do not are not fully understood and do not operate in the same ways in all individuals or settings.

Therefore, there are still many unanswered questions and controversial issues. This requires a continued commitment to critically examining and evaluating the efforts that we make to prevent substance abuse and to applying well-established scientific principles to the planning and evaluation of prevention efforts.

All decisions about which approaches should be funded by public dollars should use the findings of scientific research as a blueprint. Published prevention research studies that have been subjected to rigorous critical review are considered to be the most credible sources of scientific information. A number of federal agencies employ scientific review panels to identify programs that have credible evidence of effectiveness. Those programs that have met rigorous criteria are identified through this process. Studies demonstrating the efficacy of policy approaches are generating increased interest in environmental strategies, particularly with regard to prevention of tobacco and alcohol use and abuse among youth. Guides to socalled "best practices" and effective programs have been published by several federal agencies and other lead organizations in the prevention field (see list at the conclusion of this paper). Prevention specialists in Kentucky are responsible for seeing if those programs need to be tailored in any way to special circumstances present in Kentucky that may not have been present in the settings where the research was conducted.

Is Prevention Cost-effective?

Substance abuse creates an enormous economic and disease burden. It is estimated that the societal cost of drug abuse is over \$414 billion each year in the U.S. ²³ For each \$1 invested in prevention, up to \$10 is saved in the treatment of alcohol, tobacco, and other substance abuse. ^{24,25}

"For each \$1 invested in prevention, up to \$10 is saved in the treatment of alcohol, tobacco, and other substance abuse."

Is Prevention Working?

Recent statistics in Kentucky and on the national level show significant reductions in the use of most substances by youth over the past five years. These reductions coincide with increased dissemination of prevention programs and strategies that have evidence of effectiveness. This trend is encouraging, and appears to indicate that prevention is indeed working.

An even more compelling demonstration of prevention effectiveness can be seen at the local level when a community makes a concerted effort to reduce drug use and gathers data to evaluate its effectiveness. An example of this was documented by the Boyd/Greenup Champions for a Drug-Free Kentucky. In 1999, schools in Boyd and Greenup counties began measuring student drug use to assess needs and assist in the

planning of a comprehensive prevention strategy. Data were collected from all 6th, 8th, 10th, and 12th graders. Over the next few years, a coalition of prevention specialists, schools, businesses, local health departments, elected officials, churches, parents, youth, and concerned citizens addressed youth substance abuse issues employing a variety of strategies. Schools implemented Project Northland, a curriculum supplemented by community activity and parent involvement. Law enforcement officers increased compliance checks to be sure tobacco vendors in the area refused sales to minors. Prevention specialists conducted mock alcohol compliance checks and provided vendor education. Youth were invited to participate in alternative activities. To evaluate the effort, student surveys were conducted again in 2000, 2001, and 2002. Significant decreases in drug use (25-50%) were achieved for alcohol, tobacco, marijuana, and prescription drugs. This is one Kentucky community that has become convinced that prevention works.

Is Training Available for Prevention Workforce Development?

A number of prevention training programs are offered each year in Kentucky. There is a two-week Prevention Academy that provides the basis for further study in the field. The Kentucky School of Alcohol and Drug Studies held each year in July and the Champions conference in November afford opportunities for Kentuckians to attend courses presented by outstanding state and national experts. In addition, state and local agencies offer courses throughout the year.

"Presently, there are about 100 prevention specialists certified in Kentucky. Most are employed in the Regional Prevention Center system."

The most purposeful training program specifically for substance abuse prevention is the certification program for prevention specialists. A prevention specialist is a professional who has received in-depth training on substance abuse prevention issues. Kentucky has a certification board for prevention professionals. This board sets standards for training and supervised experience, and oversees the administration of an exam of prevention knowledge. The exam and credentialing process are compliant with the requirements of the International Certification and Reciprocity Commission, thereby establishing recognition for the certification in other states and countries.

Prevention specialists provide guidance to community organizations and task forces in the planning and implementation of prevention efforts. They also deliver prevention education programs, information services, and early intervention services. In recent years, many prevention specialists have acquired expertise in environmental strategies and have advocated for healthy public policies.

Presently, there are about 100 prevention specialists certified in Kentucky. Most are employed in the Regional Prevention Center system. These specialists have played a key role developing and promoting prevention training and credentialing.

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